

Claims:

1. Protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or parts thereof, for use in
5 medicine.
2. Antibodies directed against the protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or antigenic fragments thereof for use in medicine.
- 10 3. Nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or parts thereof, for use in medicine.
4. A vaccine for the protection against diseases caused by *Salmonella enterica*
15 subspecies I, comprising the protein, or parts thereof, encoded by the nucleotide sequence according to SEQ ID NO 1 or antibodies directed against the protein encoded by SEQ ID NO 1, or antigenic fragments thereof and, optionally, a pharmaceutically acceptable carrier.
- 20 5. A vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising the protein, or parts thereof, encoded by the nucleotide sequence according to SEQ ID NO 2 or antibodies directed against the protein encoded by SEQ ID NO 2, or antigenic fragments thereof and, optionally, a pharmaceutically acceptable carrier.
- 25 6. A nucleic acid vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I, comprising SEQ ID NO 1, or parts thereof and, optionally, a pharmaceutically acceptable carrier.
- 30 7. A nucleic acid vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising SEQ ID NO 2, or parts thereof and, optionally, a pharmaceutically acceptable carrier.
- 35 8. A vector vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I, comprising a host in which a recombinant vector comprising SEQ ID NO 1, or parts thereof, has been inserted and, optionally, a pharmaceutically acceptable carrier.

9. A vector vaccine for the protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising a host in which a recombinant vector comprising SEQ ID NO 2, or parts thereof, has been inserted and,
5 optionally, a pharmaceutically acceptable carrier.
10. A method for protection against diseases caused by *Salmonella enterica* subspecies I, comprising administering a vaccine according to any of claims 4, 6, and 8.
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11. A method for protection against diseases caused by *Salmonella enterica* subspecies I serovar Typhi, comprising administering a vaccine according to any of claims 5, 7, and 9.
12. Antibodies directed against the protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or antigenic fragments thereof, for use in a diagnostic method.
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13. Protein encoded by a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, or parts thereof, for use in a diagnostic method.
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14. Primers for or, probes that hybridize with a nucleotide sequence selected from the group consisting of SEQ ID NO 1 and SEQ ID NO 2, for use in a
25 diagnostic method.